AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application: following is a listing of all the claims as they currently stand.

LISTING OF CLAIMS:

1. (Currently Amended) A method for inducing an antigen specific systemic and rectal mucosal cytotoxic T lymphocyte (CTL) response in a mammalian subject comprising contacting a rectal mucosal tissue of the subject with a composition comprising a chimeric peptide ~~containing a first subregion with multiple overlapping helper T cell activating epitopes of a HIV isolate that can be presented by multiple MHC class II molecules and a second subregion with a CTL activating epitope of the HIV isolate, wherein the contacting induces a systemic and rectal mucosal cytotoxic T lymphocyte response that can reduce the proliferation of a virus expressing the CTL activating epitope of the HIV isolate~~ having the amino acid sequence KQIINMWQEVGKAMYAPPISGQIRRIQRGPGRAFVTIGK (SEQ ID NO: 2).

2. (Cancelled)

3. (Original) The method of claim 1, wherein said composition further comprises an adjuvant.

4. (Original) The method of claim 3, wherein the adjuvant is selected from cholera toxin (CT), mutant cholera toxin (MCT), or mutant- E. coli heat labile enterotoxin (MLT).

5. (Original) The method of claim 1, further comprising administering a purified cytokine to the subject.

6. (Previously Presented) The method of claim 5, wherein the cytokine is contacted with the rectal mucosal surface.

7. (Original) The method of claim 5, wherein the purified cytokine is selected from granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukin-2 (IL-2), interleukin-7 (IL-7), interleukin-12 (IL-12) or tumor necrosis factor a (TNFa).

8. (Original) The method of claim 1, further comprising administering purified interferon-γ to the subject.

9. (Previously Presented) The method of claim 8, wherein the purified interferon-γ is contacted with the rectal mucosal surface of the subject.

10. (Original) The method of claim 5, further comprising administering purified interferon-γ to the subject.

11. (Previously Presented) The method of claim 10, wherein the purified interferon- γ is contacted with the rectal mucosal surface of the subject.

12. (Original) The method of claim 1, wherein said composition further comprises a purified cytokine selected from granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukin-2 (IL-2), interleukin-7 (IL-7), interleukin-12 (IL-12) or tumor necrosis factor.

13. (Original) The method of claim 1, wherein said composition further comprises purified interferon-γ.

14. (Original) The method of claim 12, wherein said composition further comprises purified interferon-γ.

15.-24. (Cancelled)

25. (Currently Amended) A method for inducing an antigen specific systemic and rectal mucosal CTL response in a mammalian subject, comprising contacting a rectal

mucosal tissue of the subject with a composition comprising a chimeric peptide having the amino acid sequence KQIINMWQEVGKAMYAPPISGQIRRIQRGPGR AFVTIGK (SEQ ID NO: 2)~~containing a first subregion with multiple overlapping helper T cell activating epitopes of a HIV isolate that can be presented by multiple MHC class II molecules, and a second subregion with a CTL activating epitope of the HIV isolate~~, wherein said composition does not comprise an adjuvant, ~~and wherein the contacting induces the production of systemic and rectal mucosal cytotoxic T lymphocyte response that can reduce the proliferation of a virus expressing the CTL activating epitope of the HIV isolate~~.

26. (Original) The method of claim 25, further comprising administering a purified cytokine the subject.

27. (Previously Presented) The method of claim 26, wherein the cytokine is contacted with the rectal mucosal surface of the subject.

28. (Previously Presented) The method of claim 27, wherein the purified cytokine is selected from granulocyte-macrophage colony-stimulating factor (GM-CSF, interleukin-2 (IL-2), interleukin-7 (IL-7), interleukin-12 (IL-12) or tumor necrosis factor a (TNFa).

29. (Previously Presented) The method of claim 25, further comprising administering purified interferon-γ to the subject.

30. (Previously Presented) The method of claim 29, wherein the purified interferon-γ is contacted with a mucosal surface of the subject.

31. (Previously Presented) The method of claim 26, further comprising administering purified interferon-γ to the subject.

32. (Previously Presented) The method of claim 31, wherein the purified interferon-γ is contacted with a mucosal surface of the subject.

33. (Previously Presented) The method of claim 25, wherein said composition further comprises a purified cytokine selected from granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukin-2 (IL-2), interleukin-7 (IL-7), interleukin-12 (IL-12) or tumor necrosis factor.

34. (Previously Presented) The method of claim 25, wherein said composition further comprises purified interferon-γ.

35. (Previously Presented) The method of claim 33, wherein said composition further comprises purified interferon-γ.

36.-45. (Cancelled)

46. (Currently Amended) An immunogenic composition comprising a chimeric peptide ~~containing a first subregion with multiple over lapping helper T cell activating epitopes of a HIV-1 isolate that can be presented by multiple MHC class II molecules and a second subregion with a CTL activating epitope of the HIV-1~~ having the amino acid sequence KQIINMWQEVGKAMYAPPISGQIRRIQRGPGRAFVTIGK (SEQ ID NO: 2), formulated for intrarectal delivery to the rectum, colon, sigmoid colon, or distal colon ~~that induces an antigen specific systemic and rectal mucosal cytotoxic T lymphocyte response that can reduce the proliferation of a virus expressing the CTL activating epitope of the HIV isolate~~; wherein said composition is formulated as a rectal emulsion, foam, suppository, or gel preparation and comprises a base, carrier, or absorption-promoting agent adapted for intrarectal delivery.

47.-49. (Cancelled)

50. (Currently Amended) The immunogenic composition of claim ~~48~~ 46, wherein the chimeric peptide is admixed with a rectally-compatible homogeneous gel carrier.

51. (Previously Presented) The immunogenic composition of claim 50, wherein the homogenous gel carrier is a polyoxyethylene gel.

52.-53. (Cancelled)

54. (Currently Amended) The immunogenic composition of claim ~~53~~ 46, wherein the suppository is comprised of a base selected from a polyethyleneglycol, witepsol H15, witepsol W35, witepsol E85, propyleneglycol dicaprylate (Sefsol 228), Miglyol 810, hydroxypropylcellulose-H (HPC), or carbopol-934P (CP).

55. (Previously Presented) The immunogenic composition of claim 54, comprising at least two base materials.

56. (Previously Presented) The immunogenic composition of claim 46, further comprising a stabilizing agent to minimize intrarectal degradation of the chimeric peptide.

57. (Cancelled)

58. (Currently Amended) The immunogenic composition of claim ~~57~~ 46, wherein the absorption-promoting agent is selected from a surfactant, mixed micelle, enamines, nitric oxide donor, sodium salicylate, glycerol ester of acetoacetic acid, clyclodextrin or beta-cyclodextrin derivative, or medium-chain fatty acid.

59. (Original) The immunogenic composition of claim 46, further comprising an adjuvant.

60. (Original) The immunogenic composition of claim 59, wherein the adjuvant is selected from cholera toxin (CT), mutant cholera toxin (MCT), mutant- E. coli heat labile enterotoxin, or pertussis toxin.

61. (Original) The immunogenic composition of claim 59, wherein the adjuvant is conjugated to a mucosal tissue or T cell binding agent.

62. (Original) The immunogenic composition of claim 61, wherein the mucosal tissue or T cell binding agent is selected from protein A, an antibody that binds a mucosal tissue- or T-cell-specific protein, or a ligand or peptide that binds a mucosal tissue- or T-cell-specific protein.

63. (Currently Amended) The immunogenic composition of claim 59, wherein the adjuvant comprises a recombinant cholera toxin (CT) having a B chain of CT substituted by protein A conjugated to a CT A chain ~~to eliminate toxicity and enhance mucosal tissue binding mediated by protein A~~.

64. (Original) The immunogenic composition of claim 59, wherein the adjuvant is conjugated to a protein or peptide that binds specifically to T cells.

65. (Cancelled)

66. (Canceled)

67. (Original) The immunogenic composition of claim 59, further comprising purified IL-12.

68. (Original) The immunogenic composition of claim 59, further comprising purified interferon-γ.

69. (Original) The immunogenic composition of claim 68, further comprising purified IL-12.

70. (Cancelled)